Abstract of the Disclosure

A fuel dispenser with a booted nozzle for vapor recovery is modified to include check valves in a vapor return path. The check valves selectively allow atmospheric air into the vapor return path to alleviate nuisance shut offs at the nozzle when an ORVR vehicle is being fueled. The check valves may be included anywhere in the vapor return path between the nozzle and the vapor recovery vacuum assist pump. The fuel dispenser may further include a pressure sensor in the vapor return line so that the fuel dispenser can determine if the vehicle is an ORVR vehicle or not. If the fuel dispenser determines that an ORVR vehicle is present, the fuel dispenser may modify the operation of the vapor recovery system.